NOTE ON THE NATURAL LONGEVITY OF FERTILE FEMALES OF APHAENOGASTER PICEA

In the course of an experimental program dealing with the production of impaternate females in the Myrmicine ants *Aphaenogaster picea* and *A. lamellidens* (Haskins and Enzmann, 1945) a number of mature fertile females of *A. picea* with normal colonies were kept under observation in modified Lubbock nests for fairly prolonged periods, ranging up to thirteen years. In the course of this work it was possible to observe a total of eleven such females throughout most of their normal life spans, and to record the extent of the spans when terminated apparently normally. Since similar spans have not, to my knowledge, been recorded for the genus *Aphaenogaster* it seems worth while to report them. They are shown in Table 1.

TABLE 1

Number of Female	Age at Death	
	Years	Months
1	4	7
2	7	4
3	7	7
4	8	0
5	8	1
6	8	1
7	9	1
8	9	7
9	9	11*
10	10	7
11	13	1

* Accidentally killed

The conditions under which these females were maintained corresponded fairly closely to the natural ones except in one respect —the fact that during the winter they were maintained at ordinary room temperatures and did not, therefore, become dormant. In all but one case death occurred apparently normally and the female (the only one in the colony in each instance) was survived for a considerable time by the younger workers. Reproduction continued almost until death, though the percentage of males produced rose. It was not possible to ascertain the parentage of

these males, but it is clear either that the proportionate number of surviving progeny of the female fell in the last year of life or that the percentage of males in the female progeny rose. In the case of number 11 all production of young workers ceased about a year before the death of the queen, suggesting exhaustion of the contents of the spermatheca, as has been recorded for the aged fertile females of other ants.—CARYL P. HASKINS, *Carnegie Institution of Washington.*

HASKINS, C. P. and E. V. ENZMANN. 1945. On the occurrence of impaternate females in the Formicidae. Jour. N. Y. Ent. Soc. **53**, 263–277.